

International Application No

PCT/EP2004/050657 A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H03F1/34 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 H03FH03F Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Α . EP 1 235 344 A (NOKIA CORP) 1-10 28 August 2002 (2002-08-28) paragraph '0013! - paragraph '0015!; figure 2 Α US 2003/031271 A1 (BOZEKI JOHN JANOS 1-10 AL) 13 February 2003 (2003-02-13) cited in the application paragraph '0013! - paragraph '0027!; figure 1 WO 01/63792 A (MOTOROLA ISRAEL LTD ; Α ROZENTAL MARK (IL); BEN AYUN MOSHE (IL)) 30 August 2001 (2001-08-30) 1-10 page 6, line 1 - page 7, line 30; figures 1,2 -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international invention *X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "O" document referring to an oral disclosure, use, exhibition or document published prior to the international filing date but later than the priority date claimed *&* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 25 August 2004 01/09/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Dietsche, S



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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
4	US 5 959 499 A (KHAN ANDREW MERRITT ET AL) 28 September 1999 (1999-09-28) column 1, line 66 - column 5, line 17; figure 1	1-10
	US 5 675 286 A (GAILUS PAUL H ET AL) 7 October 1997 (1997-10-07) column 3, line 1 - column 5, line 49; figure 2	1-10
		
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	•	
	(continuation of second sheet) (January 2004)	1



information on patent family members

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Patent document dted in search report		Publication date		Patent family member(s)	•	Publication date
EP 1235344	A	28-08-2002	EP US	1235344 2002115417		28-08-2002 22-08-2002
US 2003031271	A1	13-02-2003	MO	03015365	A1	20-02-2003
WO 0163792	Α	30-08-2001	GB AU EP WO US	2359680 3765501 1260024 0163792 2003119462	A A2 A2	29-08-2001 03-09-2001 27-11-2002 30-08-2001 26-06-2003
US 5959499	Α	28-09-1999	FR WO	2769152 9917439		02-04-1999 08-04-1999
US 5675286	Α	07-10-1997	NONE			